

50%, wherein said oil is produced by culturing a producer microorganism in a fermentor with aeration.

D1A
Cmt

14. (Three Times Amended) An arachidonic acid-containing oil comprising a 24,25-methylenecholest-5-en-3 β -ol compositional ratio of 35% or lower, a 24,25-methylenecholest-5-en-3 β -ol compositional ratio in a proportion of 1.2 or less with respect to the desmosterol compositional ratio, and an arachidonic acid content of 30 to 50%, wherein said oil is produced by culturing a producer microorganism in a fermentor with aeration.

D2

30. (Amended) An immature infant formula, infant formula, baby food or pregnancy food product comprising a nutritive dietary supplement according to claim 29.

D3

32. (Twice Amended) An arachidonic acid-containing oil comprising a 24,25-methylenecholest-5-en-3 β -ol compositional ratio of 35% or lower, and an arachidonic acid content of 30 to 50%, wherein said oil is produced by culturing a producer microorganism in a fermentor with aeration.

Please add new claims 37-50 as follows:

Rule 1.24
D4

47
-37. (New) A nutritive dietary supplement comprising at least one arachidonic acid-containing oil selected from the group consisting of:

an arachidonic acid-containing oil having a 24,25-methylenecholest-5-en-3 β -ol
compositional ratio of 35% or lower and an arachidonic acid content of 30 to 50%;

an arachidonic acid-containing oil having a 24,25-methylenecholest-5-en-3 β -ol
compositional ratio in a proportion of 1.2 or less with respect to the desmosterol
compositional ratio and an arachidonic acid content of 30 to 50%; and

an arachidonic acid-containing oil having a 24,25-methylenecholest-5-en-3 β -ol
compositional ratio of 35% or lower, a 24,25-methylenecholest-5-en-3 β -ol compositional
ratio in a proportion of 1.2 or less with respect to the desmosterol compositional ratio, and
an arachidonic acid content of 30 to 50%,

wherein said oil is produced by culturing a producer microorganism in a fermentor
with aeration.

⁴⁸
~~38~~. (New) The arachidonic acid-containing oil as recited in claim 13, wherein
said producer microorganism is cultured in a fermentor with aeration in a medium
containing soybean protein as a nitrogen source.

⁴⁹
~~39~~. (New) The arachidonic acid-containing oil as recited in claim 14, wherein
said producer microorganism is cultured in a fermentor with aeration in a medium
containing soybean protein as a nitrogen source.

~~38~~
40. (New) The arachidonic acid-containing oil as recited in claim 32, wherein said producer microorganism is cultured in a fermentor with aeration in a medium containing soybean protein as a nitrogen source.

Dmt ~~39~~ 41. (New) The nutritive dietary supplement as recited in claim ~~37~~⁴⁷, wherein said producer microorganism is cultured in a fermentor with aeration in a medium containing soybean protein as a nitrogen source.

~~52~~
42. (New) An arachidonic acid-containing oil produced by a process of culturing with aeration a microorganism belonging to the genus *Mortierella* subgenus *Mortierella* in a liquid medium containing a nitrogen source derived from soybean in a fermentor under conditions effective to produce an oil having a 24,25-methylenecholest-5-en-3 β -ol compositional ratio in a proportion of 1.2 or less with respect to the desmosterol compositional ratio, and an arachidonic acid content of 30 to 50%.

~~53~~
43. (New) An arachidonic acid-containing oil produced by a process of culturing with aeration a microorganism belonging to the genus *Mortierella* subgenus *Mortierella* in a liquid medium containing a nitrogen source derived from soybean in a fermentor under conditions effective to produce an oil having a 24,25-methylenecholest-5-en-3 β -ol compositional ratio of 35% or lower, a 24,25-methylenecholest-5-en-3 β -ol compositional

ratio in a proportion of 1.2 or less with respect to the desmosterol compositional ratio, and an arachidonic acid content of 30 to 50%.

D4
om
~~54~~ 44. (New) An arachidonic acid-containing oil produced by a process of culturing with aeration a microorganism belonging to the genus *Mortierella* subgenus *Mortierella* in a liquid medium containing a nitrogen source derived from soybean in a fermentor under conditions effective to produce an oil having a 24,25-methylenecholest-5-en-3 β -ol compositional ratio of 35% or lower, and an arachidonic acid content of 30 to 50%.

~~55~~ 45. (New) The arachidonic acid-containing oil as recited in claim ~~42~~ ⁵², wherein said nitrogen source has a nitrogen content of at least 2 wt% with respect to the total components except for water.

~~56~~ 46. (New) The arachidonic acid-containing oil as recited in claim ~~43~~ ⁵³, wherein said nitrogen source has a nitrogen content of at least 2 wt% with respect to the total components except for water.

~~57~~ 47. (New) The arachidonic acid-containing oil as recited in claim ~~44~~ ⁵⁴, wherein said nitrogen source has a nitrogen content of at least 2 wt% with respect to the total components except for water.

⁵⁸
~~48.~~ (New) A nutritive dietary supplement comprising the arachidonic acid-
containing oil as recited in claim ⁵²~~42~~.

D4
mt ⁵⁹
~~49.~~ (New) A nutritive dietary supplement comprising the arachidonic acid-
containing oil as recited in claim ⁵³~~43~~.

⁶⁰
~~50.~~ (New) A nutritive dietary supplement comprising the arachidonic acid-
containing oil as recited in claim ⁵⁴~~44~~.--